

25174A

Amendment to the Claims

1. - 8. Cancelled.

9. (Previously presented) A method of manufacturing a composite sheet comprising the steps of:

- perforating a reinforcement panel;
- providing a mold surface onto which a composite sheet may be formed;
- applying at least one outer coat of material onto the mold surface;
- applying at least one coat of resin and reinforcement material over the outer coat to form a reinforcement layer;
- applying the perforated reinforcement panel to the reinforcement layer; and
- forcing the resin into the perforations formed in the reinforcement panel,

thereby bonding the reinforcement layer to the reinforcement panel, wherein the perforating step is accomplished by moving the reinforcement panel through three sets of opposed pinch-rollers, one roller of a middle set of the three sets being a perforating mandrel having a plurality of tapered perforating pins.

10. (Previously presented) A method of manufacturing a composite sheet comprising the steps of:

- perforating a reinforcement panel;
- providing a mold surface onto which a composite sheet may be formed;
- applying at least one outer coat of material onto the mold surface;
- applying at least one coat of resin and reinforcement material over the outer coat to form a reinforcement layer;
- applying the perforated reinforcement panel to the reinforcement layer; and
- forcing the resin into the perforations formed in the reinforcement panel,

thereby bonding the reinforcement layer to the reinforcement panel,

wherein the perforating step includes creating a plurality of tapered holes in the reinforcement panel, the tapered holes having an opening diameter within the range of

25174A

from about 1/32 inch to about 1/16 inch in a first side of the reinforcement panel and having an opening diameter within the range of from about 5/32 inch to about 3/16 inch in a second side of the reinforcement panel, and

wherein the perforating step is accomplished by moving the reinforcement panel through three sets of opposed pinch-rollers, one roller of a middle set of the three sets being a perforating mandrel having a plurality of perforating pins.

11. - 41. Cancelled.

42. (Previously presented) A method of manufacturing a composite sheet comprising the steps of:

forming perforations in a reinforcement panel;

providing a mold surface onto which a composite sheet may be formed;

applying at least one coat of resin and reinforcement material over the mold to form a reinforcement layer;

applying the perforated reinforcement panel to the reinforcement layer; and

evacuating substantially all air trapped between the resin and the resin and the reinforcement panel through the perforations, wherein the perforating step is accomplished by moving the reinforcement panel through three sets of opposed pinch-rollers, one roller of a middle set of the three sets being a perforating mandrel having a plurality of perforating pins.

43. - 45. Cancelled.

45. (Previously presented) The method of manufacturing a composite sheet according to Claim 9 wherein the forcing step is accomplished by applying a vacuum to the perforated reinforcement panel.

25174A

46. (Previously presented) The method of manufacturing a composite sheet according to Claim 9 wherein a polymer sheet is applied to the perforated reinforcement panel prior to the forcing step.

47. (Previously presented) The method of manufacturing a composite sheet according to Claim 10 wherein the forcing step is accomplished by applying a vacuum to the perforated reinforcement panel.

48. (Previously presented) The method of manufacturing a composite sheet according to Claim 10 wherein a polymer sheet is applied to the perforated reinforcement panel prior to the forcing step.

49. (Previously presented) The method of manufacturing a composite sheet according to Claim 42 wherein the forcing step is accomplished by applying a vacuum to the perforated reinforcement panel.

50. (Previously presented) The method of manufacturing a composite sheet according to Claim 42 wherein a polymer sheet is applied to the perforated reinforcement panel prior to the forcing step.